

# Features & Specifications

## 2016 KingQuad 750AXi



LT-A750XL6

YT9: Flame Red

### Introduction

- In 1983, Suzuki introduced the world's first 4-wheel ATV. Today, Suzuki ATVs are everywhere. From Three decades of ATV manufacturing experience has led to the KingQuad 750AXi, Suzuki's most powerful and technologically advanced ATV. Abundant torque developed by the 722cc fuel-injected engine gives the KingQuad the get up and go that's a must-have for Utility Sport ATVs. With an independent rear suspension, locking front differential, and a handful of other features, the KingQuad 750AXi comes loaded with all the necessities to make sure you get the job done. If you're looking for a utility sport ATV, find out what makes this Suzuki worthy of the name KingQuad.

### Engine Features

- The powerful 722cc, DOHC, single-cylinder, liquid-cooled, four-stroke engine is tuned to deliver strong low-to-mid range torque as well as high-rpm power.
- The cylinder and head are canted forward for a low center of gravity resulting in reduced engine height and lower seat height. High-mount air intake avoids water and debris.
- The 4-valve cylinder head has large 36mm intake valves and straight ports for superb cylinder charging efficiency. A sportbike-derived chain-and-gear camshaft drive system creates a compact cylinder head.
- A lightweight aluminum cylinder uses SCEM (Suzuki Composite Electrochemical Material) coating for excellent heat transfer and ring sealing resulting in superb combustion chamber efficiency.
- The engine also features dual balancer shafts for smooth operation.
- High capacity aluminum radiator with large diameter, thermostatically controlled cooling fan provides stable engine operating temperature.

### Transmission Features

- The Quadmatic™ CVT-type automatic transmission provides versatility and convenience with a fender-mounted gate-type shifter for high/low range selection. Its advanced engine-braking system minimizes free-wheeling with the throttle off and helps control the vehicle during steep descents.
- A compact torque-sensing limited-slip front differential offers potent traction plus light steering. A differential-lock system provides serious four-wheel-drive traction.

- Handlebar-mounted push-button controls permit easy selection between 2WD, 4WD and differential-lock 4WD. An override button on the left handlebar can be used to override the normal speed limiter when stuck in the mud.



**LT-A750XL6**

YLG: Terra Green

## Chassis Features

- Independent double A-arm front suspension (7.1 inches of wheel travel) includes large diameter shock absorbers with 5-way spring preload adjustment.
- Fully independent, A-arm/I-beam rear suspension with 7.9 inches of wheel travel includes large diameter shock absorbers with 5-way spring preload adjustment and large diameter rear sway-bar.
- Dual hydraulic front disc brakes plus a sealed, multi-plate rear brake system. The rear brake's clutch-type design provides high durability, reduced unsprung weight and low-maintenance.
- High traction 25-inch CARLISLE tires are mounted on heavy-duty steel wheels.
- Suzuki's plush T-shaped seat delivers rider mobility during spirited or difficult terrain riding.
- Polyethylene skid plates provide protection with minimal resistance over rocks and rough terrain. Durable plastic guards protect the front and rear half shafts.

## Utility/Convenience Features

- Winch-ready mounts and wire conduit makes winch installation simple.
- Instrumentation includes LCD readouts for speedometer, odometer, twin tripmeter, hour meter, clock, fuel level, driving range and drive mode. LED indicators for high, low, neutral, reverse and 2WD/4WD and differential-locked 4WD. LED cautions for fuel injection and engine temperature.
- Distinctively-styled twin 30W halogen headlights plus a compact 5/21W tail light and brake light.
- High-output, three-phase charging system feeds an 18-amp maintenance-free battery for abundant power for easy starting and accessory use.
- The large 4.6 gallon (17.5 L) fuel tank is positioned for a low center-of-gravity. It includes a vacuum-operated petcock and a ratchet-style filler cap.
- A large 2.8 liter water resistant front storage compartment includes an easy access screw-on cap.
- The rugged steel-tube cargo racks have wrinkle paint finish for durability and scratch resistance.
- Full floorboards with integrated raised footpegs provide protection.

## Additional Features

- A variety of Suzuki Genuine Accessories are available, including winches, windshield, front and rear bumpers, snow plow, aluminum skid pans, rack extensions, utility box and more.
- 12-month limited warranty
- For more details, please visit [www.suzukicycles.com](http://www.suzukicycles.com).

# Specifications LT-A750XL6

## E-03: USA, E-33: California

### DIMENSIONS AND CURB MASS

|                        |                   |
|------------------------|-------------------|
| Overall length .....   | 2115 mm (83.3 in) |
| Overall width .....    | 1210 mm (47.6 in) |
| Overall height .....   | 1245 mm (49.0 in) |
| Wheelbase .....        | 1280 mm (50.4 in) |
| Front track .....      | 930 mm (36.6 in)  |
| Rear track .....       | 940 mm (37.0 in)  |
| Ground clearance ..... | 270 mm (10.6 in)  |
| Seat height .....      | 880 mm (34.6 in)  |
| Curb mass .....        | 302 kg (666 lbs)  |

### ENGINE

|                           |   |
|---------------------------|---|
| Type .....                | 4-stroke, liquid-cooled, DOHC               |
| Number of cylinders ..... | 1   |
| Bore .....                | 104.0 mm (4.094 in)                         |
| Stroke .....              | 85.0 mm (3.346 in)                          |
| Displacement .....        | 722 cm <sup>3</sup> (44.1 cu. in)           |
| Compression ratio .....   | 9.9 : 1                                     |
| Fuel system .....         | Fuel injection                              |
| Air cleaner .....         | Paper element and Polyurethane form element |
| Starter system .....      | Electric                                    |
| Lubrication system .....  | Wet sump                                    |
| Idle speed .....          | 1400 ± 100 r/min                            |

### DRIVE TRAIN

|  |                                       |
|--|---------------------------------------|
| Clutch .....                               | Wet shoe, automatic, centrifugal type |
| Transmission .....                         | Automatic variable ratio (V-belt)     |
| Transfer .....                             | 2-speed forward with reverse          |
| Gearshift pattern, Transmission .....      | Automatic                             |
| Transfer .....                             | L-H-N-R (Hand operated)               |
| Automatic transmission ratio .....         | 2.763 - 0.779 (Variable change)       |
| Secondary reduction ratio .....            | 2.158 (40/21 × 17/15)                 |
| Final reduction ratio (Front & Rear) ..... | 3.600 (36/10)                         |
| Transfer gear ratio, Low .....             | 2.562 (41/16)                         |
| High .....                                 | 1.240 (31/25)                         |
| Reverse .....                              | 1.882 (32/17)                         |
| Drive system .....                         | Shaft drive                           |

# Specifications LT-A750XL6

E-03: USA, E-33: California

## CHASSIS

|                         |   |
|-------------------------|---|
| Front suspension .....  | Independent, double wishbone, coil spring, oil damped |
| Rear suspension.....    | Independent, double wishbone, coil spring, oil damped |
| Front wheel travel..... | 180 mm (7.1 in)                                       |
| Rear wheel travel.....  | 200 mm (7.9 in)                                       |
| Caster .....            | 1.6°  |
| Trail.....              | 3.4 mm (0.13 in)                                      |
| Toe-out.....            | 10 mm (0.39 in)                                       |
| Camber .....            | 0.64°   |
| Steering angle .....    | 46° (right & left)                                    |
| Turning radius.....     | 3.1 m (10.2 ft)                                       |
| Front brake .....       | Disc brake, twin                                      |
| Rear brake.....         | Sealed oil-bathed multi-disc                          |
| Front tire.....         | AT25 × 8-12☆☆, tubeless                               |
| Rear tire .....         | AT25 × 10-12☆☆, tubeless                              |

## ELECTRICAL

|   |                                      |
|---|--------------------------------------|
| Ignition type.....                          | Electronic ignition (Transistorized) |
| Ignition timing.....                        | 6° B.T.D.C. at 1400 r/min            |
| Spark plug .....                            | NGK LMAR7A-9                         |
| Battery.....                                | 12V 64.8 kC (18 Ah)/10 HR            |
| Generator .....                             | Three-phase A.C. generator           |
| Main fuse.....                              | 30A                                  |
| Fuse.....                                   | 10/10/10/10/15/15A                   |
| Headlight.....                              | 12V 35/35W × 2                       |
| Brake light/Taillight .....                 | 12V 21/5W                            |
| Speedometer light.....                      | LED                                  |
| Neutral indicator light.....                | LED                                  |
| High beam indicator light .....             | LED                                  |
| Coolant temperature/FI indicator light..... | LED                                  |
| Reverse indicator light .....               | LED                                  |
| Diff-lock indicator light.....              | LED                                  |

## CAPACITIES

|                              |                              |
|------------------------------|------------------------------|
| Fuel tank .....              | 17.5 L (4.6/3.8 US/Imp gal)  |
| Engine oil, oil change ..... | 2300 ml (2.4/2.0 US/Imp qt)  |
| with filter change.....      | 2500 ml (2.6/2.2 US/Imp qt)  |
| overhaul.....                | 3000 ml (3.2/2.6 US/Imp qt)  |
| Differential gear oil.....   | 500 ml (16.9/17.6 US/Imp oz) |
| Final gear oil.....          | 770 ml (26.0/27.1 US/Imp oz) |
| Coolant.....                 | 2.5 L (2.6/2.2 US/Imp qt)    |

# Service Data LT-A750XL6

## E-03: USA, E-33: California

### Valve + Valve Guide

Unit: mm (in)

| Item                                |           | Standard   | Limit        |
|-------------------------------------|-----------|--|--------------|
| Valve diam.                         | IN.       | 36.0 (1.42)  | —            |
|                                     | EX.       | 33.0 (1.30)  | —            |
| Tappet clearance (When cold)        | IN.       | 0.10 – 0.20 (0.004 – 0.008)  | —            |
|                                     | EX.       | 0.20 – 0.30 (0.008 – 0.012)  | —            |
| Valve guide to valve stem clearance | IN.       | 0.010 – 0.037 (0.0004 – 0.0015)  | —            |
|                                     | EX.       | 0.030 – 0.057 (0.0012 – 0.0022)  | —            |
| Valve guide I.D.                    | IN. & EX. | 5.500 – 5.512 (0.2165 – 0.2170)  | —            |
| Valve stem O.D.                     | IN.       | 5.475 – 5.490 (0.2156 – 0.2161)  | —            |
|                                     | EX.       | 5.455 – 5.470 (0.2148 – 0.2154)  | —            |
| Valve stem deflection               | IN. & EX. | —  | 0.35 (0.014) |
| Valve stem runout                   | IN. & EX. | —  | 0.05 (0.002) |
| Valve head thickness                | IN. & EX. | —  | 0.5 (0.02)   |
| Valve seat width                    | IN. & EX. | 0.9 – 1.1 (0.035 – 0.043)  | —            |
| Valve head radial runout            | IN. & EX. | —  | 0.03 (0.001) |
| Valve spring free length            | IN. & EX. | —  | 46.1 (1.81)  |
| Valve spring tension                | IN. & EX. | 182 – 210 N (18.6 – 21.4 kgf, 41.0 – 47.2 lbs)<br>at length 36.35 mm (1.43 in) | —            |

### Camshaft + Cylinder Head

Unit: mm (in)

| Item  |           | Standard                          | Limit           |
|---|-----------|-----------------------------------|-----------------|
| Cam height                                    | IN.       | 36.330 – 36.380 (1.4303 – 1.4323) | 36.030 (1.4185) |
|   | EX.       | 35.300 – 35.350 (1.3898 – 1.3917) | 35.000 (1.3780) |
| Camshaft journal oil clearance                | IN. & EX. | 0.019 – 0.053 (0.0007 – 0.0021)   | 0.150 (0.0059)  |
| Camshaft journal holder I.D.                  | IN. & EX. | 22.012 – 22.025 (0.8666 – 0.8671) | —               |
| Camshaft journal O.D.                         | IN. & EX. | 21.972 – 21.993 (0.8650 – 0.8659) | —               |
| Camshaft runout                               | IN. & EX. | —                                 | 0.10 (0.004)    |
| Cylinder head distortion                      |           | —                                 | 0.05 (0.002)    |
| Cam drive idle gear/sprocket thrust clearance |           | 0.15 – 0.27 (0.006 – 0.011)       | —               |

**Cylinder + Piston + Piston Ring**

Unit: mm (in)

| Item   | Standard   |    | Limit                         |
|--|--|----|-------------------------------|
| Compression pressure<br>(Automatic-decomp. actuated) | Approx. 1 000 kPa (10.0 kgf/cm <sup>2</sup> , 142 psi)                               |    | —                             |
| Piston-to-cylinder clearance                         | 0.030 – 0.040 (0.0012 – 0.0016)  |    | 0.120 (0.0047)                |
| Cylinder bore  | 104.000 – 104.015 (4.0945 – 4.0951)  |    | Nicks or<br>Scratches         |
| Piston diam.   | 103.965 – 103.980 (4.0931 – 4.0937)<br>Measure at 15 mm (0.6 in) from the skirt end. |    | 103.880 (4.0898)              |
| Cylinder distortion                                  | —  |    | 0.05 (0.002)                  |
| Piston ring free end gap                             | 1st  | R  | Approx. 13.1 (0.52)           |
|  | 2nd  | RN | Approx. 14.6 (0.57)           |
| Piston ring end gap                                  | 1st  | R  | 0.10 – 0.25 (0.004 – 0.010)   |
|  | 2nd  | RN | 0.10 – 0.25 (0.004 – 0.010)   |
| Piston ring-to-groove clearance                      | 1st  |    | —                             |
|  | 2nd  |    | —                             |
| Piston ring groove width                             | 1st  |    | 0.83 – 0.85 (0.0327 – 0.0335) |
|  |  |    | 1.30 – 1.32 (0.0512 – 0.0520) |
|  | 2nd  |    | 1.01 – 1.03 (0.0398 – 0.0406) |
|  | Oil  |    | 2.01 – 2.03 (0.0791 – 0.0799) |
| Piston ring thickness                                | 1st  |    | 0.76 – 0.81 (0.0299 – 0.0319) |
|  |  |    | 1.08 – 1.10 (0.0425 – 0.0433) |
|  | 2nd  |    | 0.97 – 0.99 (0.0382 – 0.0390) |
| Piston pin bore I.D.                                 | 23.002 – 23.008 (0.9056 – 0.9058)  |    | 23.030 (0.9067)               |
| Piston pin O.D.                                      | 22.995 – 23.000 (0.9053 – 0.9055)  |    | 22.980 (0.9047)               |

**Conrod + Crankshaft**

Unit: mm (in)

| Item                          | Standard                          | Limit           |
|-------------------------------|-----------------------------------|-----------------|
| Conrod small end I.D.         | 23.006 – 23.014 (0.9057 – 0.9061) | 23.040 (0.9071) |
| Conrod deflection             | —                                 | 3.0 (0.12)      |
| Conrod big end side clearance | 0.10 – 0.75 (0.004 – 0.030)       | 1.0 (0.04)      |
| Conrod big end width          | 24.95 – 25.00 (0.982 – 0.984)     | —               |
| Crank web to web width        | 72.9 – 73.1 (2.87 – 2.88)         | —               |
| Crankshaft runout             | —                                 | 0.08 (0.003)    |

**Oil Pump**

| Item                            | Standard   | Limit |
|---------------------------------|--|-------|
| Oil pressure (at 60 °C, 140 °F) | 140 – 180 kPa<br>(1.4 – 1.8 kgf/cm <sup>2</sup> , 20 – 26 psi)<br>at 3 000 r/min | —     |

**Clutch**

Unit: mm (in)

| Item                    | Standard                      | Limit                    |
|-------------------------|-------------------------------|--------------------------|
| Clutch wheel I.D.       | 140.0 – 140.2 (5.512 – 5.520) | 140.5 (5.53)             |
| Clutch shoe             | —                             | No groove<br>at any part |
| Clutch engagement r/min | 1 500 – 2 000 r/min           | —                        |
| Clutch lock-up r/min    | 3 500 – 4 000 r/min           | —                        |

## Drive Train

Unit: mm (in) Except ratio

| Item  |                                    | Standard                                | Limit        |
|---|------------------------------------|---|--------------|
| Automatic transmission ratio                |                                    | Variable change (2.763 – 0.779)         | —            |
| Secondary reduction ratio                   |                                    | 2.158 (40/21 x 17/15)                   | —            |
| Final reduction ratio                       | Front                              | 3.600 (36/10)                           | —            |
|   | Rear                               | 3.600 (36/10)                           | —            |
| Transfer gear ratio                         | Low                                | 2.562 (41/16)                           | —            |
|   | High                               | 1.240 (31/25)                           | —            |
|   | Reverse                            | 1.882 (32/17)                           | —            |
| Drive V-belt width                          |                                    | 34.3 (1.35)                             | 33.3 (1.31)  |
| Movable driven face spring free length      |                                    | 153.0 (6.02)                            | 145.4 (5.72) |
| Shift fork to groove clearance              | Low                                | 0.10 – 0.30 (0.0040 – 0.0120)           | 0.50 (0.020) |
|   | High                               | 0.10 – 0.30 (0.0040 – 0.0120)           | 0.50 (0.020) |
|   | Reverse                            | 0.10 – 0.30 (0.0040 – 0.0120)           | 0.50 (0.020) |
| Shift fork groove width                     | Low                                | 5.50 – 5.60 (0.217 – 0.220)             | —            |
|   | High                               | 5.50 – 5.60 (0.217 – 0.220)             | —            |
|   | Reverse                            | 5.50 – 5.60 (0.217 – 0.220)             | —            |
| Shift fork thickness                        | Low                                | 5.30 – 5.40 (0.209 – 0.213)             | —            |
|   | High                               | 5.30 – 5.40 (0.209 – 0.213)             | —            |
|   | Reverse                            | 5.30 – 5.40 (0.209 – 0.213)             | —            |
| Front/Rear output shaft bevel gear backlash |                                    | 0.03 – 0.15 (0.001 – 0.006)             | —            |
| Front drive (differential) gear backlash    |                                    | 0.05 – 0.10 (0.002 – 0.004)             | —            |
| Rear drive (final) gear backlash            | Without gear cover specification   | 0.02 – 0.06 (0.0008 – 0.0024)           | —            |
|   | Gear cover assembled specification | 0.08 – 0.15 (0.0031 – 0.0059)           | —            |
| Front differential gear oil type            |                                    | Hypoid gear oil SAE #90, API grade GL-5 | —            |
| Rear drive gear oil type                    |                                    | Mobil 424 or equivalent gear oil        | —            |
| Front differential gear oil capacity        |                                    | 500 ml (0.5/0.4 US/Imp qt)              | —            |
| Final gear oil capacity                     |                                    | 770 ml (0.7/0.6 US/Imp qt)              | —            |

### Thermostat + Radiator + Fan + Coolant

| Item                                 | Standard  |  | Note |
|--------------------------------------|---|--|------|
| Thermostat valve opening temperature | Approx. 82 °C (180 °F)  |  | —    |
| Thermostat valve lift                | 8 mm (0.31 in) and over at 95 °C (203 °F)   |  | —    |
| ECT sensor resistance                | 20 °C<br>(68 °F)  | Approx. 2.45 kΩ                        | —    |
|                                      | 50 °C<br>(122 °F)   | Approx. 0.811 kΩ                       | —    |
|                                      | 80 °C<br>(176 °F)   | Approx. 0.318 kΩ                       | —    |
| Radiator cap valve opening pressure  | 110 – 140 kPa (1.1 – 1.4 kgf/cm <sup>2</sup> , 15.6 – 19.9 psi)                               |  | —    |
| Cooling fan operating temperature    | OFF → ON  | Approx. 93 °C (199 °F)                 | —    |
|                                      | ON → OFF  | Approx. 87 °C (189 °F)                 |      |
| Engine coolant type                  | Use an antifreeze/coolant compatible with aluminum radiator, mixed with distilled water only. |  | —    |
| Engine coolant                       | Reservoir   | Approx. 250 ml (0.26/0.22 US/Imp qt)   | —    |
|                                      | Engine  | Approx. 2 200 ml (2.32/1.94 US/Imp qt) | —    |

### Injector + Fuel Pump + Fuel Pressure Regulator

| Item   | Specification                                      | Note |
|--|--|------|
| Injector resistance                            | 11 – 13 Ω at 20 °C (68 °F)                         |      |
| Fuel pump discharge amount                     | 55.5 ml (1.88/1.95 US/Imp qt) and more/10 sec.     |      |
| Fuel pressure regulator operating set pressure | Approx. 294 kPa (2.9 kgf/cm <sup>2</sup> , 41 psi) |      |

### FI Sensors + Secondary Throttle Valve Actuator

| Item                                   | Specification                        |               | Note             |
|--|--------------------------------------|---------------|------------------|
| CKP sensor resistance                  | 150 – 250 Ω                          |               |                  |
| CKP sensor peak voltage                | 5.0 V and more                       |               | When cranking    |
| IAP sensor input voltage               | 4.5 – 5.5 V                          |               |                  |
| IAP sensor output voltage              | Approx. 2.37 V at idle speed         |               |                  |
| TP sensor input voltage                | 4.5 – 5.5 V                          |               |                  |
| TP sensor output voltage               | Closed                               | Approx. 1.1 V |                  |
|  | Opened                               | Approx. 4.3 V |                  |
| ECT sensor input voltage               | 4.5 – 5.5 V                          |               |                  |
| ECT sensor output voltage              | 0.15 – 4.85 V                        |               |                  |
| ECT sensor resistance                  | Approx. 2.45 kΩ at 20 °C (68 °F)     |               |                  |
| IAT sensor input voltage               | 4.5 – 5.5 V                          |               |                  |
| IAT sensor output voltage              | 0.15 – 4.85 V                        |               |                  |
| IAT sensor resistance                  | Approx. 1.60 kΩ at 20 °C (68 °F)     |               |                  |
| TO sensor resistance                   | 19 – 20 kΩ                           |               |                  |
| TO sensor voltage                      | Normal                               | 0.4 – 1.4 V   | When leaning 65° |
|  | Leaning                              | 3.7 – 4.4 V   |                  |
| GP switch voltage                      | 0.6 V and more                       |               | From 1st to Top  |
| Injector voltage                       | Battery voltage                      |               |                  |
| Ignition coil primary peak voltage     | 80 V and more                        |               | When cranking    |
| ISC valve resistance                   | Approx. 31 Ω at 20 °C (68 °F)        |               |                  |
| PAIR control solenoid valve resistance | 20 – 24 Ω at 20 – 30 °C (68 – 86 °F) |               |                  |
| Vehicle speed sensor input voltage     | Battery voltage                      |               |                  |



## Throttle Body

| Item                | Specification                     | Note |
|---------------------|-----------------------------------|------|
| Bore size           | 42 mm                             |      |
| I.D. No.            | 31G1                              |      |
| Idle r/min          | 1 400 ± 100 r/min                 |      |
| Fast idle r/min     | 1 400 – 1 600 r/min (cold engine) |      |
| Throttle cable play | 3 – 5 mm (0.12 – 0.20 in)         |      |

## Electrical

Unit: mm (in)

| Item  | Specification                     | Note   |      |
|---|-----------------------------------|--|------|
| Spark plug                                      | Type                              | NGK: LMAR7A-9  |      |
|   | Gap                               | 0.8 – 0.9 (0.031 – 0.035)                                |      |
| Spark performance                               | Over 8 (0.3) at 1 atm.            |  |      |
| CKP sensor resistance                           | 150 – 250 Ω                       |  |      |
| CKP sensor peak voltage                         | 5.0 V and more                    |  |      |
| Ignition coil resistance                        | Primary                           | 1 – 5 Ω  |      |
|   | Secondary                         | 25 – 40 kΩ   |      |
| Ignition coil primary peak voltage              | 150 V and more                    | Terminal<br>– Ground                                     |      |
| Generator coil resistance                       | 0.4 – 1.0 Ω                       | Plug cap<br>– Terminal                                   |      |
| Generator maximum output                        | Approx. 400 W at 5 000 r/min      | When<br>cranking   |      |
| Generator no-load voltage (When engine is cold) | 75 V (AC) and more at 5 000 r/min |  |      |
| Regulated voltage                               | 13.5 – 15.5 V at 5 000 r/min      |  |      |
| Starter motor brush length                      | Standard                          | 12.0 (0.47)  |      |
|   | Limit                             | 6.5 (0.26)   |      |
| Starter torque limiter slip torque              | Standard                          | 41.2 – 62.8 N·m<br>(4.2 – 6.4 kgf-m, 14.5 – 32.5 lbf-ft) |      |
| Starter relay resistance                        |                                   | 3 – 5 Ω  |      |
| Battery   | Type designation                  | YTX20CH-BS   |      |
|   | Capacity                          | 12 V 64.8 kC (18 Ah)/10 HR                               |      |
| Fuse size                                       | Headlight                         | HI   | 10 A |
|   |                                   | LO   | 10 A |
|   | Fuel                              | 10 A   |      |
|   | Ignition                          | 15 A   |      |
|   | Power source                      | 10 A   |      |
|   | Main                              | 30 A   |      |

**Wattage**

Unit: W

| Item  |    | Specification |
|---|----|---------------|
| Headlight   | HI | 35 x 2        |
|   | LO | 35 x 2        |
| Brake light/Tail light                                  |    | 21/5          |
| Speedometer light                                       |    | LED           |
| High beam indicator light                               |    | LED           |
| Neutral indicator light                                 |    | LED           |
| FI indicator light/Engine coolant temp. indicator light |    | LED           |
| Reverse indicator light                                 |    | LED           |
| Differential lock indicator light                       |    | LED           |

**Brake + Wheel**

Unit: mm (in)

| Item                                | Standard                          | Limit        |
|-------------------------------------|-----------------------------------|--------------|
| Front brake disc thickness          | —                                 | 3.0 (0.12)   |
| Front brake disc runout             | —                                 | 0.30 (0.012) |
| Front master cylinder bore          | 14.000 – 14.043 (0.5512 – 0.5529) | —            |
| Front master cylinder piston diam.  | 13.957 – 13.984 (0.5495 – 0.5506) | —            |
| Front brake caliper cylinder bore   | 33.960 – 34.010 (1.3370 – 1.3390) | —            |
| Front brake caliper piston diam.    | 33.878 – 33.928 (1.3338 – 1.3357) | —            |
| Rear brake pedal height             | 12.5 – 22.5 (0.5 – 0.9)           | —            |
| Rear brake pedal free travel        | 20 – 30 (0.8 – 1.2)               | —            |
| Rear brake lever play               | 6 – 8 (0.2 – 0.3)                 | —            |
| Rear brake outer distance           | 26.0 – 27.0 (1.02 – 1.06)         | —            |
| Brake side plate spring free length | 21.3 (0.84)                       | 20.2 (0.80)  |
| Brake fluid type                    | DOT 4                             | —            |
| Steering angle                      | 46° (right & left)                | —            |
| Turning radius                      | 3.1 m (10.2 ft)                   | —            |
| Toe-out (With 75 kg, 165 lbs)       | 10 ± 4 mm (0.39 ± 0.16)           | —            |
| Camber                              | 0.64°                             | —            |
| Caster                              | 1.6°                              | —            |

**Tire**

Unit: mm (in)

| Item  | Standard |   | Limit      |
|---|----------|---|------------|
| Cold inflation tire pressure<br>(Solo riding) | Front    | 35 kPa (0.35 kgf/cm <sup>2</sup> , 5.1 psi) | —          |
|   | Rear     | 30 kPa (0.30 kgf/cm <sup>2</sup> , 4.4 psi) | —          |
| Tire size                                     | Front    | AT25 x 8-12 ☆☆, tubeless                    | —          |
|   | Rear     | AT25 x 10-12 ☆☆, tubeless                   | —          |
| Tire tread depth                              | Front    | —   | 4.0 (0.16) |
|   | Rear     | —   | 4.0 (0.16) |

**Suspension**

Unit: mm (in)

| Item                                    | Standard     | Limit |
|---|--------------|-------|
| Front shock absorber spring<br>adjustor | 2/5 position | —     |
| Rear shock absorber spring adjustor     | 2/5 position | —     |

**Fuel + Oil**

| Item                | Specification   | Note                         |
|---------------------|---|------------------------------|
| Fuel type           | Use unleaded gasoline with an octane rating of 87 AKI or higher.<br>Do not use leaded gasoline.<br>Unleaded gasoline containing up to 15% MTBE by volume may be used.<br>Unleaded gasoline containing up to 10% ethanol by volume may be used.<br>Unleaded gasoline containing up to 5% methanol by volume may be used if it also contains appropriate cosolvents and corrosion inhibitors. |                              |
| Fuel tank capacity  | 17.5 L (4.6/3.8 US/Imp gal)   |                              |
| Engine oil type     | SAE 10 W-40, API SF/SG or SH/SJ with JASO MA  |                              |
| Engine oil capacity | Change  | 2 300 ml (2.4/2.0 US/Imp qt) |
|                     | Filter change   | 2 500 ml (2.6/2.2 US/Imp qt) |
|                     | Overhaul  | 3 000 ml (3.2/2.6 US/Imp qt) |

## Tightening Torque List

### Engine

| Item                                 |         | N-m | kgf-m | lbf-ft |
|--------------------------------------|---------|-----|-------|--------|
| Spark plug                           |         | 11  | 1.1   | 8.0    |
| Cylinder head cover bolt             | Initial | 10  | 1.0   | 7.0    |
|                                      | Final   | 14  | 1.4   | 10.0   |
| Cam drive idle gear/sprocket shaft   |         | 41  | 4.1   | 29.5   |
| Intake pipe bolt                     |         | 9   | 0.9   | 6.5    |
| Cylinder head bolt (M6)              |         | 10  | 1.0   | 7.0    |
| Cylinder head bolt (L: 200)          | Initial | 25  | 2.5   | 18.0   |
|                                      | Final   | 37  | 3.7   | 27.0   |
| Cylinder head bolt (L: 70)           |         | 10  | 1.0   | 7.0    |
| Cylinder head bolt (L: 100)          |         | 10  | 1.0   | 7.0    |
| Cylinder base nut                    |         | 10  | 1.0   | 7.0    |
| Camshaft journal holder bolt         |         | 10  | 1.0   | 7.0    |
| Cam chain tension adjuster bolt      |         | 10  | 1.0   | 7.0    |
| Cam chain tension adjuster cap bolt  |         | 7   | 0.7   | 5.0    |
| Cam chain tensioner bolt             |         | 23  | 2.3   | 16.5   |
| Crankcase bolt (M6)                  |         | 10  | 1.0   | 7.0    |
| Crankcase bolt (M8)                  |         | 26  | 2.6   | 19.0   |
| Valve timing inspection plug         |         | 23  | 2.3   | 16.5   |
| Clutch shoe nut                      |         | 150 | 15.0  | 108.5  |
| Movable drive face bolt              |         | 110 | 11.0  | 79.5   |
| Movable driven face bolt             |         | 110 | 11.0  | 79.5   |
| Movable driven face ring nut         |         | 110 | 11.0  | 79.5   |
| V-belt outer cover bolt              |         | 8   | 0.8   | 6.0    |
| V-belt inner cover bolt              |         | 9   | 0.9   | 6.5    |
| Generator rotor nut                  |         | 160 | 16.0  | 115.5  |
| Generator stator set bolt            |         | 11  | 1.1   | 8.0    |
| Generator lead wire clamp bolt       |         | 6   | 0.6   | 4.5    |
| Speed sensor bolt                    |         | 10  | 1.0   | 7.0    |
| Starter clutch bolt                  |         | 26  | 2.6   | 19.0   |
| Exhaust pipe nut                     |         | 25  | 2.5   | 18.0   |
| Muffler connecting bolt              |         | 25  | 2.5   | 18.0   |
| Muffler mounting bolt                |         | 25  | 2.5   | 18.0   |
| Muffler cover bolt                   |         | 10  | 1.0   | 7.0    |
| Muffler tail cover bolt              |         | 10  | 1.0   | 7.0    |
| Spark arrester bolt                  |         | 10  | 1.0   | 7.0    |
| Oil filter                           |         | 20  | 2.0   | 14.5   |
| Engine oil drain plug                |         | 21  | 2.1   | 15.0   |
| Engine coolant drain plug            |         | 13  | 1.3   | 9.5    |
| Drive bevel gear nut                 |         | 100 | 10.0  | 72.5   |
| Front output shaft nut               |         | 100 | 10.0  | 72.5   |
| Engine mounting nut                  |         | 60  | 6.0   | 43.5   |
| Engine mounting damper stopper bolt  |         | 23  | 2.3   | 16.5   |
| Rear output shaft nut                |         | 100 | 10.0  | 72.5   |
| Crank balancer drive gear nut        |         | 150 | 15.0  | 108.5  |
| Crank balancer driven gear bolt      |         | 50  | 5.0   | 36.0   |
| Starter motor mounting bolt          |         | 10  | 1.0   | 7.0    |
| Starter motor lead wire mounting nut |         | 6   | 0.6   | 4.5    |
| Starter motor housing bolt           |         | 5   | 0.5   | 3.5    |
| Main oil gallery plug                |         | 18  | 1.8   | 13.0   |
| Air cleaner box mounting bolt        |         | 4.5 | 0.45  | 3.0    |
| Left crankshaft spacer nut           |         | 38  | 3.8   | 27.5   |
| Oil gallery plug (Cylinder head)     |         | 10  | 1.0   | 7.0    |
| PAIR reed valve cover bolt           |         | 10  | 1.0   | 7.0    |

## Drive Train

| Item  | N-m | kgf-m | lbf-ft |
|---|-----|-------|--------|
| 2WD/4WD/Diff-lock actuator mounting bolt          | 22  | 2.2   | 16.0   |
| Front drive (Differential) gear case cover bolt   | 22  | 2.2   | 16.0   |
| Front drive (Differential) gear case mounting nut | 50  | 5.0   | 36.0   |
| Front drive (Differential) gear oil level plug    | 8.5 | 0.85  | 6.0    |
| Front drive (Differential) gear oil filler plug   | 35  | 3.5   | 25.5   |
| Front drive (Differential) gear oil drain plug    | 32  | 3.2   | 23.0   |
| Final drive gear nut                              | 100 | 10.0  | 72.5   |
| Final drive gear bearing stopper                  | 100 | 10.0  | 72.5   |
| Final gear case cover bolt (M8)                   | 26  | 2.6   | 19.0   |
| Final gear case cover bolt (M10)                  | 55  | 5.5   | 40.0   |
| Final gear case mounting nut                      | 75  | 7.5   | 54.0   |
| Final gear case mounting bolt                     | 75  | 7.5   | 54.0   |
| Rear propeller shaft boot clamp screw             | 2   | 0.2   | 1.5    |
| Final gear oil drain plug                         | 23  | 2.3   | 16.5   |
| Rear propeller shaft coupling nut                 | 100 | 10.0  | 72.5   |
| Front output shaft bolt                           | 10  | 1.0   | 7.0    |
| Rear output shaft nut                             | 100 | 10.0  | 72.5   |
| Rear output shaft drive bevel gear nut            | 100 | 10.0  | 72.5   |
| Rear output shaft driven gear nut                 | 100 | 10.0  | 72.5   |
| Front propeller shaft boot clamp screw            | 1.3 | 0.13  | 1.0    |
| Rear propeller shaft boot clamp screw             | 2   | 0.2   | 1.5    |

## FI System, Intake Air System and Fuel System

| Item                                     | N-m | kgf-m | lbf-ft |
|--|-----|-------|--------|
| CKP sensor mounting bolt                 | 6   | 0.6   | 4.5    |
| CKP sensor bracket bolt                  | 6   | 0.6   | 4.5    |
| Fuel delivery pipe mounting screw        | 3.5 | 0.35  | 2.5    |
| ECT sensor                               | 18  | 1.8   | 13.0   |
| ISC valve mounting screw                 | 2   | 0.2   | 1.5    |
| TP sensor mounting screw                 | 2   | 0.2   | 1.5    |
| GP switch                                | 6.5 | 0.65  | 4.7    |
| Air cleaner outlet tube clamp screw      | 1.5 | 0.15  | 1.0    |
| Intake pipe clamp screw                  | 1.5 | 0.15  | 1.0    |
| PAIR control solenoid valve bracket bolt | 10  | 1.0   | 7.0    |

## Cooling System

| Item                                  | N-m | kgf-m | lbf-ft |
|---------------------------------------|-----|-------|--------|
| Water pump cover screw                | 6   | 0.6   | 4.5    |
| Water pump mounting bolt              | 10  | 1.0   | 7.0    |
| Thermostat cover bolt                 | 23  | 2.3   | 16.5   |
| Cooling fan assembly mounting bolt    | 8.5 | 0.85  | 6.0    |
| Water bypass union                    | 12  | 1.2   | 8.5    |
| Radiator reservoir tank mounting bolt | 6   | 0.6   | 4.5    |
| Water union bolt                      | 10  | 1.0   | 7.0    |

## Chassis

| Item   | N-m | kgf-m | lbf-ft |
|--|-----|-------|--------|
| Handlebar clamp bolt                               | 26  | 2.6   | 19.0   |
| Handlebar holder nut                               | 60  | 6.0   | 43.5   |
| Rear brake lever holder clamp bolt                 | 10  | 1.0   | 7.0    |
| Throttle lever case bolt                           | 4   | 0.4   | 3.0    |
| Steering shaft holder bolt                         | 23  | 2.3   | 16.5   |
| Steering shaft lower nut                           | 162 | 16.2  | 117.0  |
| Front suspension arm pivot nut (Upper)             | 60  | 6.0   | 43.5   |
| Front suspension arm pivot nut (Lower)             | 65  | 6.5   | 47.0   |
| Steering knuckle end nut (Upper and Lower)         | 29  | 2.9   | 21.0   |
| Tie-rod end nut                                    | 29  | 2.9   | 21.0   |
| Tie-rod lock-nut                                   | 45  | 4.5   | 32.5   |
| Front shock absorber mounting bolt (Upper)         | 55  | 5.5   | 40.0   |
| Front shock absorber mounting nut (Lower)          | 60  | 6.0   | 43.5   |
| Front wheel hub nut                                | 110 | 11.0  | 79.5   |
| Rear wheel hub nut                                 | 121 | 12.1  | 87.5   |
| Wheel set nut (Front and Rear)                     | 60  | 6.0   | 43.5   |
| Brake hose union bolt                              | 23  | 2.3   | 16.5   |
| Front brake air bleeder valve                      | 6   | 0.6   | 4.5    |
| Front brake pad mounting pin                       | 18  | 1.8   | 13.0   |
| Front brake caliper mounting bolt                  | 26  | 2.6   | 19.0   |
| Caliper holder pin                                 | 18  | 1.8   | 13.0   |
| Caliper holder slide pin                           | 23  | 2.3   | 16.5   |
| Brake pipe flare nut                               | 16  | 1.6   | 11.5   |
| Brake disc bolt                                    | 23  | 2.3   | 16.5   |
| Brake disc cover mounting bolt                     | 10  | 1.0   | 7.0    |
| Brake master cylinder holder bolt                  | 10  | 1.0   | 7.0    |
| Footrest mounting bolt (M8)                        | 26  | 2.6   | 19.0   |
| Footrest mounting bolt (M10)                       | 55  | 5.5   | 40.0   |
| Rear stabilizer joint nut                          | 60  | 6.0   | 43.5   |
| Rear shock absorber mounting nut (Upper and Lower) | 60  | 6.0   | 43.5   |
| Rear suspension arm pivot nut (Upper and Lower)    | 60  | 6.0   | 43.5   |
| Rear knuckle end nut (Upper and Lower)             | 60  | 6.0   | 43.5   |
| Rear brake cam lever nut                           | 11  | 1.1   | 8.0    |
| Rear brake case bolt                               | 26  | 2.6   | 19.0   |
| Rear brake pedal pivot bolt                        | 11  | 1.1   | 8.0    |
| Trailer towing mounting bolt                       | 60  | 6.0   | 43.5   |
| Front brake lever pivot bolt                       | 6   | 0.6   | 4.5    |
| Front brake lever pivot bolt lock-nut              | 6   | 0.6   | 4.5    |
| Rear brake lever pivot bolt                        | 6.5 | 0.65  | 4.7    |
| Rear brake lever pivot bolt lock-nut               | 6.5 | 0.65  | 4.7    |
| Front propeller shaft boot clamp screw             | 1.3 | 0.13  | 1.0    |
| Rear propeller shaft boot clamp screw              | 2   | 0.2   | 1.5    |